

Abstract

The invention concerns an electromagnetic radiation sensing device with integrated housing including two superimposed sensors. A first sensor detects one first wavelength range, and a second sensor detects a second wavelength range. The first sensor is arranged inside a protective housing, whereof at least the upper wall includes the second sensor. The wavelengths of the first range, for example included in the infrared domain are, preferably, greater than the wavelengths of the second range, which can be included in the visible or ultraviolet domain. The first sensor is, preferably, a bolometer comprising a sensitive elements and support element forming electrical connection elements between the first sensor and/or the second sensor and an electronic processing circuit.

(12) DEMANDE INTERNATIONALE PUBLIÉE EN VERTU DU TRAITÉ DE COOPÉRATION
EN MATIÈRE DE BREVETS (PCT)(19) Organisation Mondiale de la Propriété
Intellectuelle
Bureau international(43) Date de la publication internationale
25 mars 2004 (25.03.2004)

PCT

(10) Numéro de publication internationale
WO 2004/025694 A3

(51) Classification internationale des brevets⁷ : H01L 31/0203, 25/04

(21) Numéro de la demande internationale : PCT/FR2003/002696

(22) Date de dépôt international : 11 septembre 2003 (11.09.2003)

(25) Langue de dépôt : français

(26) Langue de publication : français

(30) Données relatives à la priorité : 02/11457 16 septembre 2002 (16.09.2002) FR

(71) Déposant (pour tous les États désignés sauf US) : COMMISSARIAT A L'ENERGIE ATOMIQUE [FR/FR]; 31-33, rue de la Fédération, F-75752 Paris (FR).

(72) Inventeurs; et

(75) Inventeurs/Déposants (pour US seulement) : OUVRIER-BUFFET, Jean-Louis [FR/FR]; 430, route de la Planche, F-74320 Sévrier (FR). MOREL, Damien [FR/FR]; 51, rue Marx Dormoy, F-38000 Grenoble (FR). MASSONI, Nicolas [FR/FR]; 51, rue Marx Dormoy, F-38000 Grenoble (FR).

(74) Mandataires : HECKE, Gérard etc.; Cabinet Hecke, WTC Europole, 5, place Robert Schuman, B.P. 1537, F-38025 Grenoble Cédex 1 (FR).

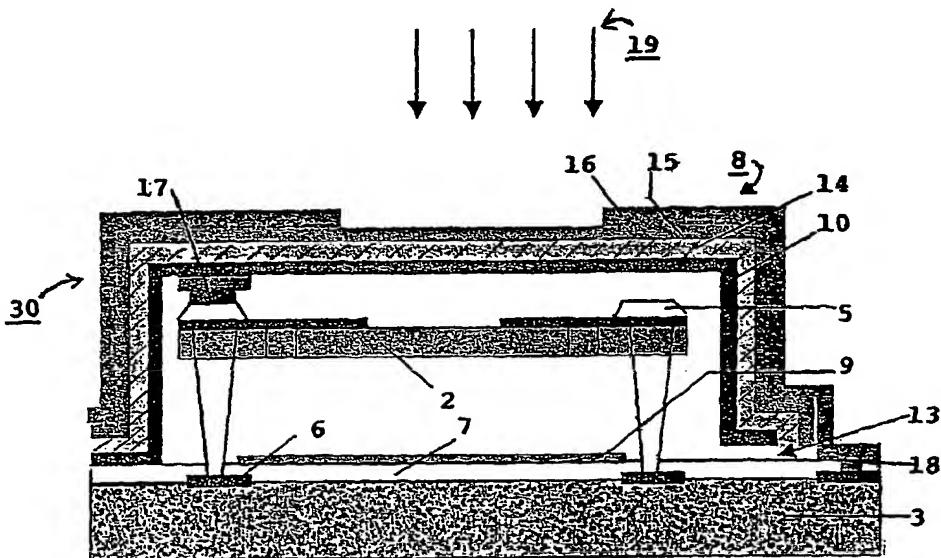
(81) États désignés (national) : JP, US.

(84) États désignés (régional) : brevet européen (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

[Suite sur la page suivante]

(54) Title: ELECTROMAGNETIC RADIATION SENSING DEVICE WITH INTEGRATED HOUSING INCLUDING TWO SUPERIMPOSED SENSORS

(54) Titre : DISPOSITIF DETECTEUR DE RAYONNEMENT ELECTROMAGNETIQUE AVEC BOITIER INTEGRE COMPORTANT DEUX DETECTEURS SUPERPOSES



(57) Abstract: The invention concerns an electromagnetic radiation sensing device with integrated housing including two superimposed sensors. A first sensor detects one first wavelength range, and a second sensor (30) detects a second wavelength range. The first sensor is arranged inside a protective housing (8), whereof at least the upper wall includes the second sensor (30). The wavelengths of the first range, for example included in the infrared domain are, preferably, greater than the wavelengths of the second range, which can be included in the visible or ultraviolet domain. The first sensor is, preferably, a bolometer (1) comprising a sensitive elements (2) and support element (5) forming electrical connection elements between the first sensor and/or the second sensor (30) and an electronic processing circuit (3).

[Suite sur la page suivante]

WO 2004/025694 A3